The Contributors to this Issue

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GEORGE A. CAMPBELL, B.S., Massachusetts Institute of Technology, 1891; A.B., Harvard, 1892; Ph.D., 1901; Göttingen, Vienna and Paris, 1893–96. Mechanical Department, American Bell Telephone Company, 1897; Engineering Department, American Telephone and Telegraph Company, 1903-1919; Department of Development and Research, 1919—; Research Engineer, 1908—. Dr. Campbell has published papers on loading and the theory of electric circuits and is also well-known to telephone engineers for his contributions to repeater and substation circuits. The electric filter which is one of his inventions plays a fundamental role in telephone repeater, carrier current and radio systems.

H. M. TRUEBLOOD, B.S., Earlham, 1902; Haverford, 1903; Massachusetts Institute of Technology, 1908–09; Ph.D., Harvard, 1913; aid and assistant United States Coast and Geodetic Survey, 1903–08; assistant in physics, Harvard, 1912–14; Joule-Thomson effect in super-heated steam; instructor and assistant professor electrical engineering, University of Pennsylvania, 1914–17; Department of Development and Research, American Telephone and Telegraph Comcompany, 1917—; work on inductive interference.

J. J. PILLIOD, E.E., Ohio Northern University, 1908; American Telephone and Telegraph Company, Toledo Home Telephone Company, and Union Switch and Signal Company, short periods, 1904–08; American Telephone and Telegraph Company, Long Lines Department, 1908–11; Engineering Department, 1912–13; Division Plant Engineer, Long Lines Department, 1914–17; Engineer of Transmission, 1918–19; Engineer, 1920–. As Engineer of the Long Lines Department, Mr. Pilliod has been in general charge of engineering work involved in the planning and installation of the newer sections of the cable project described.

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Company, 1910–12; instructor of physics and electrical engineering, Princeton, 1912–14; American Telephone and Telegraph Company, Engeneering Department, 1914–15; Patent Department, 1916–17; Engineering Department, 1918; Department of Development and Research, 1919–. Mr. Carson's work has been along theoretical lines and he has published several papers on theory of electric circuits and electric wave propagation.

J. J. GILBERT, A.B., University of Pennsylvania, 1909; Harvard, 1910–11; Chicago, 1911–12; E.E., Armour Institute, 1915; instructor of electrical engineering, Armour, 1912–17; Captain Signal Corps, 1917–19; Engineering Department, Western Electric Company, 1919, since when he has worked on submarine cable problems.

I. B. CRANDALL, A.B., Wisconsin, 1909; A.M., Princeton, 1910; Ph.D., 1916; Professor of Physics and Chemistry, Chekiang Provincial College, 1911–12; Engineering Department, Western Electric Company, 1913–. Dr. Crandall has published papers on infra-red optical properties, condenser transmitter, thermophone, etc. More recently he has been associated with studies on the nature and analysis of speech which have been in progress in the Laboratory.

DONALD MACKENZIE, A.B., Johns Hopkins, 1908; A.M., 1911; Ph.D., 1914; assistant astronomy, 1914–17; associate physicist, Bureau of Standards, 1918–20; Engineering Department, Western Electric Company, 1920–.

HARVEY FLETCHER, B.S., Brigham Young, 1907; Ph.D., Chicago, 1911; instructor of physics, Brigham Young, 1907–08; Chicago, 1909–10; Professor, Brigham Young, 1911–16; Engineering Department, Western Electric Company, 1916–. The present paper by Dr. Fletcher gives some of the results of an investigation which is being made of the relation between the frequency characteristics of telephone circuits and the intelligibility of transmitted speech. Dr. Fletcher has also published on Brownian movements, ionization and electronics.